

Attorney Docket No. P64029US0
Serial No. 09/423,622

Amendments to the claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of claims:

Claims 1-47 (canceled).

48. (new) A method for enhancing axonal regeneration comprising specific inhibition of basal membrane formation induced by a lesion of neuronal tissue, the specific inhibition being effected by systemically or locally administering to a body in need thereof an inhibitor of basal membrane formation selected from the group consisting of an antibody against collagen IV, laminin, entactin, an inhibitor of an amino acid hydroxylase, and a combination thereof, thereby promoting recovery of CNS functionality.

49. (new) The method of claim 48, wherein the inhibitor is an amino acid hydroxylase selected from the group consisting of an Fe-chelating agent, a 2-oxoglutarate competitor, and a combination thereof.

50. (new) The method of claim 48, wherein the amino acid hydroxylase is prolyl 4-hydroxylase or lysine-hydroxylase.

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51. (new) The method according claim 48, wherein the inhibitor is administered in combination with a substance that stimulates neuronal growth.

52. (new) The method according claim 48, wherein the inhibitor is locally administered, intraventricularly, to the neuronal tissue.

53. (new) The method according claim 48, wherein the inhibitor is systemically administered, orally or intravenously.

54. (new) The method according claim 48, wherein the inhibitor substance is administered in an amount of 1 ng/kg to 1 mg/kg body weight.

55. (new) A method of treating a lesion of neuronal tissue, which lesion induces basal cell membrane formation, comprising systemically or locally administering, to a body in need thereof, a specific inhibitor of the basal membrane formation selected from the group consisting of an antibody against collagen IV, laminin, entactin, an inhibitor of an amino acid hydroxylase, and a combination thereof, thereby promoting recovery of CNS functionality.

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56. (new) The method of claim 55, wherein the inhibitor is an amino acid hydroxylase selected from the group consisting of an Fe-chelating agent, a 2-oxoglutarate competitor, and a combination thereof.

57. (new) The method of claim 55, wherein the amino acid hydroxylase is prolyl 4-hydroxylase or lysine-hydroxylase.

58. (new) The method according claim 55, wherein the inhibitor is administered in combination with a substance that stimulates neuronal growth.

59. (new) The method according claim 55, wherein the inhibitor is locally administered, intraventricularly, to the neuronal tissue.

60. (new) The method according claim 55, wherein the inhibitor is systemically administered, orally or intravenously.

61. (new) The method according claim 55, wherein the inhibitor substance is administered in an amount of 1 ng/kg to 1 mg/kg body weight.